

U.S. DEPT. OF COMMERCE
PATENT & TRADEMARK OFFICE
OCT 02 1998

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

APPLICATION NO.

MASIMO.7CP1C4

09/144,897

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT

M. Diab et al.

FILING DATE

September 1, 1998

GROUP

Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>E</i>	4 8 0 0 4 9 5	1/24/89	Smith			
	4 8 2 4 2 4 2	4/25/89	Frick et al.			
	4 8 6 3 2 6 5	9/5/89	Flower et al.			
	4 8 6 7 5 7 1	9/19/89	Frick et al.			
	4 8 9 2 1 0 1	1/9/90	Cheung et al.			
	4 9 0 7 5 9 4	3/13/90	Muz			
	4 9 1 1 1 6 7	3/27/90	Corenman et al.			
	4 9 2 8 6 9 2	5/29/90	Goodman et al.			
	4 9 5 5 3 7 9	9/11/90	Hall			
<i>E</i>	5 0 5 7 6 9 5	10/15/91	Hirao et al.			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

<i>E</i>	1.	Rabiner, Lawrence et al. <u>Theory and Application of Digital Signal Processing</u> , p. 260, 1975.
<i>E</i>	2.	Tremper, Kevin et al., <u>Advances in Oxygen Monitoring</u> , pp. 137-153, 1987.
<i>E</i>	3.	Harris, Fred et al., "Digital Signal Processing with Efficient Polyphase Recursive All-Pass Filters", Presented at International Conference on Signal Processing, Florence, Italy, Sept. 4-6, 1991, 6 pages.
<i>E</i>	4.	Haykin, Simon, <u>Adaptive Filter Theory</u> , Prentice Hall, Englewood Cliffs, NJ, 1991.
<i>E</i>	5.	Widrow, Bernard, <u>Adaptive Signal Processing</u> , Prentice Hall, Englewood Cliffs, NJ 1985.

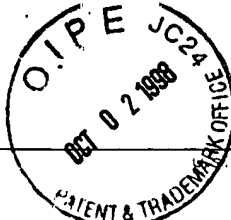
EXAMINER

DATE CONSIDERED

E

6/27/03

*EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.



FORM PTO-1449

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

APPLICATION NO.

MASIMO.7CP1C4

09/144,897

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT

M. Diab et al.

FILING DATE

September 1, 1998

GROUP

Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
Σ	5 2 7 3 0 3 6	12/28/93	Kronberg et al.			
	3 6 4 7 2 9 9	3/7/72	Lavallee			
	3 7 0 4 7 0 6	12/5/72	Herczfeld et al.			
	4 0 6 3 5 5 1	12/20/77	Sweeney			
	4 0 8 6 9 1 5	5/2/78	Kofsky et al.			
	4 0 9 5 1 1 7	6/13/78	Nagy			
	4 4 0 7 2 9 0	10/4/83	Wilber			
	4 5 3 7 2 0 0	8/27/85	Widrow			
	4 6 4 9 5 0 5	3/10/87	Zinser, Jr. et al.			
Σ	4 7 7 3 4 2 2	9/27/88	Isaacson et al.			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

Σ	6.	Brown, David P., "Evaluation of Pulse Oximeters using Theoretical Models and Experimental Studies", Master's thesis, University of Washington, 11/25/87, pp. 1-142.
Σ	7.	Cohen, Arnon, "Volume I" Time and Frequency Domains Analysis", Biomedical Signal Processing, CRC Press, Inc., Boca Raton, Florida, pp. 152-159.
Σ	8.	Severinghaus, J.W., "Pulse Oximetry Uses and Limitations", pp. 1-4, ASA Convention, New Orleans, 1989.
Σ	9.	Mook, G.A., et al., "Spectrophotometric determination of Oxygen saturation of blood independent of the presence of indocyanine green", Cardiovascular Research, Vol. 13, pp. 233-237, 1979.

EXAMINER

Σi

DATE CONSIDERED

6/27/93

*EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

MASIMO.7CP1C4

APPLICATION NO.

09/144,897

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT

Diab et al.

FILING DATE

September 1, 1998

GROUP

Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
h	4 7 9 9 4 9 3	1/24/89	DuFault			
	4 8 4 8 9 0 1	7/18/89	Hood, Jr.			
	4 8 6 0 7 5 9	8/29/89	Kahn et al.			
	4 8 6 9 2 5 3	9/26/89	Craig, Jr. et al.			
	4 8 6 9 2 5 4	9/26/89	Stone et al.			
	4 8 8 3 3 5 3	11/28/89	Hausman			
	4 9 2 7 2 6 4	5/22/90	Shiga et al.			
	4 9 4 8 2 4 8	8/14/90	Lehman			
	4 9 5 6 8 6 7	9/11/90	Zurek et al.			
	5 4 5 8 1 2 8	10/17/95	Pulanyi et al.			

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
					YES NO

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

10.	Neuman, Michael R., "Pulse Oximetry: Physical Principles, Technical Realization and Present Limitations", <u>Continuous Transcutaneous Monitoring</u> , Plenum Press, New York, 1987, pp. 135-144.
11.	Mook, G.A., et al., "Wavelength dependency of the spectrophotometric determination of blood oxygen saturation", <u>Clinical Chemistry Acta</u> , Vol. 26, pp. 170-173, 1969.
12.	Klimasauskas, Casey, "Neural Nets and Noise Filtering", <u>Dr. Dobb's Journal</u> , January 1989, pg. 32.
13.	Melnikof, S. "Neural Networks for Signal Processing: A Case Study", <u>Dr. Dobb's Journal</u> , January 1989. pg.36-37

EXAMINER

DATE CONSIDERED

*EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

APPLICATION NO.

MASIMO.7CP1C4

09/144,897

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT

Diab et al.

FILING DATE

September 1, 1998

GROUP

Unknown

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
E	4 7 2 3 2 9 4	02/02/88	Taguchi	X	X	
	4 8 1 9 7 5 2	04/11/89	Zelin			
	4 9 6 0 1 2 6	10/02/90	Conlon et al.			
	5 2 4 6 0 0 2	09/21/93	Prosser			
	5 6 6 2 1 0 5	09/02/97	Tien			

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
E	S U 1 6 7 4 7 9 8	9/91	Abstract from Database WPI,	Derwent	Publications		
E	9 2 / 1 5 9 5 5	17/09/92	PCT				

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

E	14.	Jingzheng, Ouyang et al., "Digital Processing of High-Resolution Electrocardiograms--Detection of His-Purkinje Activity from the Body Surface", <u>Biomedizinische Technik</u> , 33, 1 October 1988, No.10, Berlin, W. Germany, pp. 224-230.
	15.	Chen, Jiande, et al., "Adaptive System for Processing of Electrogastic Signals", <u>Images of the Twenty-First Century</u> , Seattle, WA, vol. 11, Nov. 9-12, 1989. pp. 698-699.
	16.	Varanini, M. et al., "A Two Channel Adaptive Filtering Approach for Recognition of the QRS Morphology", <u>Proceedings of the Computers in Cardiology Meeting</u> , Venice, Sept. 23-26, 1991, Institute of Electrical and Electronics Engineers, pp. 141-144.

EXAMINER

DATE CONSIDERED

*EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.